- 5. (Two Times Amended) The olefin copolymer as claimed in claim 10, of which the tensile modulus is at most 600 MPa.
- 6. (Two Times Amended) The olefin copolymer as claimed in claim 10, of which the internal haze is at most 20 %.
- 7. (Two Times Amended) The olefin copolymer as claimed in claim 10, which is obtained by polymerizing a cyclic olefin, an aromatic vinyl compound and an aliphatic α-olefin having from 2 to 20 carbon atoms in the presence of an olefin polymerization catalyst that comprises (D) at least one selected from transition metal compounds of groups 4 to 6 of the Periodic Table and transition metal compounds of Groups 8 to 10 of the Periodic Table of the following general formulae (1) to (4), and (E) at least one selected from a compound group of (e-1) oxygen-containing organometallic compounds, (e-2) ionic compounds capable of reacting with the transition metal compounds to form ionic complexes, and (e-3) clay, clay minerals and ion-exchanging layered compounds:

$$Q_a^1 (C_5 H_{5-a-b} R_b^1) (C_5 H_{5-a-c} R_c^2) M^1 X^1 Y^1 (1)$$

$$Q_{a}^{2} (C_{5}H_{5-a-d}R_{d}^{3}) Z^{1}M^{1}X^{1}Y^{1}$$
 (2)

$$(C_5H_{5-e}R_e^4)M^1X^1Y^1W^1$$
 (3)

$$L^{1}L^{2}M^{2}X^{1}Y^{1} \tag{4}$$

wherein  $Q^1$  represents a bonding group that crosslinks the two conjugated five-membered cyclic ligands ( $C_5H_{5-a-b}R^1_b$ ) and ( $C_5H_{5-a-c}R^2_c$ );  $Q^2$  represents a bonding group that crosslinks the conjugated five-membered cyclic ligand ( $C_5H_{5-a-d}R^3_d$ ) and the group  $Z^1$ ,  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  each represent a hydrocarbon group, a halogen atom, an alkoxy group, a silicon-containing hydrocarbon group, a phosphorus-containing hydrocarbon group, a nitrogen-containing hydrocarbon group, or a boron-containing hydrocarbon group; and a plurality of these groups, if any, may be the same or different, and may be bonded to each other to form a cyclic

structure; a represents 0, 1 or 2; b, c and d each represent an integer of from 0 to 5 when a = 0, or an integer of from 0 to 4 when a = 1, or an integer of from 0 to 3 when a = 2; e is an integer of from 0 to 5;  $M^1$  represents a transition metal of Groups 4 to 6 or Groups 8 to 10 of the Periodic Table;  $M^2$  represents a transition metal of Groups 8 to 10 of the Periodic Table;  $L^1$  and  $L^2$  each represent a covalent-bonding or coordination-bonding ligand, and they may be bonded to each other;  $X^1$ ,  $Y^1$ ,  $Z^1$  and  $W^1$  each represent a covalent-bonding or ionic-bonding ligand, and  $X^1$ ,  $Y^1$  and  $W^1$  may be bonded to each other.

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8. (Two Times Amended) A film or sheet comprising the olefin copolymer of claim

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B3

9. (Amended) A method of making a film or sheet, the method comprising molding, casting, extruding, or calendaring the olefin copolymer of claim 10; and producing the film or sheet.

Please add new Claims 10-13 as follows:

- --10. (New) An olefin copolymer comprising
- 0.1 to 10 mol% of a cyclic olefin;

the olefin copolymer; and

0.1 to 45 mol% of an aromatic vinyl compound; and an aliphatic  $\alpha$ -olefin having from 2 to 20 carbon atoms, wherein the cyclic olefin and the aromatic vinyl compound account for from 0.2 to 50 mol% of

the olefin copolymer has a glass transition temperature T<sub>g</sub> of lower than 60°C.

11. (New) The olefin copolymer as claimed in claim 10, of which the limiting viscosity [η] measured in decalin at 135°C falls between 0.01 and 20 dl/g.

B4

12. (New) A method of making an olefin copolymer, the method comprising copolymerizing a cyclic olefin, an aromatic vinyl compound and an aliphatic α-olefin having from 2 to 20 carbon atoms; and producing the olefin copolymer of claim 10.

13. (New) A method of using an olefin copolymer, the method comprising molding, casting, extruding, or calendaring the olefin copolymer of claim 10 to produce a film or sheet.--

## SUPPORT FOR THE AMENDMENT

This Amendment cancels Claims 1-2 and 4; amends Claims 3 and 5-9; and adds new Claims 10-13. Support for the amendments is found in the specification and claims as originally filed. In particular, support for Claim 9 is found in the specification at least at page 57, lines 24-25. Support for new independent Claim 10 is found in canceled Claims 1 and 2. Support for new Claim 11 is found in canceled Claim 4. Support for new Claim 12 is found at least in canceled Claim 1. Support for new Claim 13 is found in the specification at least at page 57, lines 24-25. No new matter would be introduced by entry of these amendments.

Upon entry of these amendments, Claims 3 and 5-13 will be pending in this application. Claim 10 is independent.

## REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

The present invention provides an olefin ter-copolymer which comprises a cyclic olefin, an aromatic vinyl compound and an aliphatic  $\alpha$ -olefin having from 2 to 20 carbon

atoms in a specific compositional ratio and which has a glass transition temperature of less than 60°C. The inventive olefin copolymer provides a substitute for conventional soft polyvinyl chloride in forming films and sheets having good elastic recovery and transparency.

Claims 1-9 are rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 5,874,512 ("Farley"). Farley discloses tackifier resins that are copolymers of a cyclic olefin, an aromatic-group-containing monomer and an α-olefin. Farley at Abstract. Farley discloses that for use as a tackifier the copolymer resins preferably include about 5 mol% or more, more preferably about 10 mol% to about 90 mol%, most preferably from greater than 20 mol% to 75 mol%, of the cyclic olefins. Farley at column 17, lines 1-9. However, Farley's examples all disclose at least 24 mol% of cyclic olefin. Thus, Farley fails to exemplify the independent Claim 10 limitation of "0.1 to 10 mol% of a cyclic olefin". Furthermore, Farley fails to suggest that Farley's tackifier could produce the films and sheets having good elastic recovery and transparency achieved according to the present invention using the claimed olefin copolymer. Thus, Farley fails to anticipate the claimed invention.

Claims 8 and 9 are rejected under 35 U.S.C. § 112, second paragraph. To obviate the rejection, Claims 8 and 9 are amended.

Pursuant to MPEP § 821.04, after independent product Claim 10 is allowed,

Applicants respectfully request examination and allowance of new method Claims 12-13,

which include all the limitations of product claim 10.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER AND NEUSTADT, P.C.

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Attachment:

Marked-up copy of amendments

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